Vol. XI. No. 2. January 15, 1914

THE JOURNAL OF PHILOSOPHY
PSYCHOLOGY AND SCIENTIFIC METHODS

VALUE AND POTENTIALITY

HENRI POINCARE[1] stood for the thesis that "scientific fact is nothing but brute fact translated into a convenient language," and further that "all that the scientist creates in his fact is the language in which he enunciates it"; and J. T. Merz[2] introduces us to that part of his monumental work that deals with philosophy by the statement that "more even than in science, we may say that in philosophy progress consists in finding an appropriate verbal expression, or, having found it, in conveying to our readers the clear definition of the meaning we desire to attach to it." If there is any truth in these opinions, then, it follows that the reconsideration of the terms in which any concept is defined is important, and the enunciation of a more clear or more convenient definition, a real progress.

Within the whole realm of philosophy, it seems to the writer, few concepts have suffered from inept formulation more than the concept of value, and this not because of peculiar difficulty concerning fact, but because of the interests of theologians and metaphysicians who have, for the most part, either reduced it to an abstraction or deduced it as corollary to an already accepted system. Metaphysical conceptions of value,[3] such as those of Professor Münsterberg and Mr. Russell, only become intelligible, if at all, when one is ensconced in the system; and psychological conceptions, such as are found among the German philosophers, and, in less objectionable form, among the realists and some of the pragmatists, carry with them many obscure connotations from psychology. Indeed, the psychologists, in this instance as in many others, are in a more difficult position than the metaphysicians, for in addition to the metaphysical assumption that the reality of value has something to do with mind, they are beset with difficulties due to the vacillation of their science between behaviorism, paral-

1 "The Value of Science," Pt. III., sec. 3.

2 "History of European Thought in the Nineteenth Century," Vol. III., page 4.

3 J. F. Dashiell, "The Philosophical Status of Values," New York, 1913 (thesis).

lelism, and spiritualism to such a degree that the "S O S" call is sent to-day rather from psychology to philosophy than in the counter direction.

To examine the weaknesses of these contemporary theories systematically would be a task of such magnitude that to attempt it here would be to remain walled up like the five kings in the cave of Makkedah, while the victorious psychologists and metaphysicians sweep the field. In consequence, this paper will merely attempt to restate the facts of value with as much concreteness and independence of the connotations of any system as the nature of the case permits. The result, although aiming at neither agreements nor disagreements with accepted positions, will doubtless attain both, but it desires neither credit nor discredit therefor, but rather seeks criticism on the ground that it successfully "walks around the idea and looks at it from all sides"—to borrow Professor Dewey's characterization of one of his analyses.

That the concept of potentiality might be the key to a useful discussion of the facts under consideration is suggested by the root meaning of the word *value,* for the value of an object, by derivation, is that of which the object is capable, the development of its potentialities. But first it is necessary to review the meaning of potentiality.

A potentiality of an actual thing is, I believe, generally accepted to be nothing but the thing itself in relation to some transformation, either of itself or of its environment, that might be brought about under some conditions, at some time, through the actuality of the thing. The group of conditions necessary for the realization of any specific effect are, each of them, potential contributors to its realization, but each demands the cooperation of the others before it can become an actual cause, and some one of these factors is generally seized upon as the effect "in potentiality." But which? They can not all be so chosen, for with them all given the effect is at once actual, although this fact is often obscured or denied when such factors as space and time are overlooked. And such oversight is not justifiable, for if cause is defined in the usual manner as the indispensable condition of an event, space and time are certainly cooperating causes. In such stock examples as "the egg is a potential chicken," "a pile of bricks is potentially a wall," "steel is a potential knife," it is the material cause to which the potentiality is accredited. This is the result of picking out a striking factor in the situation which impresses us by some empirically intimate relation to the effect and letting that factor stand as the condition *par excellence* of the effect. But we are not always uniform in this usage, and, indeed, in many instances, its applicability is not obvious. Thus the potentiality of old age may be said to lie in continued existence, and

the potentiality of success in constant application, and here it is hardly a question of material cause, in a modern nomenclature, but of what is merely the "warmest" causal factor. But even this restriction is somewhat arbitrary and, although it is, perhaps, contrary to every-day usage, it is surely not meaningless to ascribe the potentiality of an effect to any of its causal factors. Thus space and time, as well as the egg, are potential chickens, for they are indispensable conditions of the chicken-realization. It may be this is turning them into material causes. Bergson does this in the case of time, and there may be good ground, in the dynamic changes that result from mere proportional increase in spatial magnitude, to believe something analogous is true in the case of space. But at any rate, natural choices in this matter are expressions of human interest rather than of the ontological character of the thing chosen.

The potentialities of an object in some sense constitute its values, but to identify the two terms would be to blur terms better kept apart, provided a suitable differentia can be found. A frequent procedure is to assume that potentialities become values through the selective activity of some human interest. Thus the egg is valuable because of its chicken-potentiality, or the steel because of its knife-potentiality, *when* somebody wants that chicken or that knife. This is a view that makes the distinction between potentiality and value depend neither on a difference in the objects nor on the processes of transformation they are to initiate or undergo, nor on the end to be realized, nor on any relation between these things, but only on the attitude with which our thought approaches them, and while it is a very excellent thing to have distinctions of this sort in language—for language has much more to do than to express the mere facts of an objective world, and must often suggest our attitude toward them and the angles at which we approach them—it is unfortunate when the philosopher confuses such distinctions with the ontological status of facts, and, at best, it is a bad thing to accept a subjective differentia of a concept when it is possible to find others less ephemeral and more closely bound up with the nature of things. The human organism is essentially egoistic and lives by making things realize its ends through their potentialities. Consequently it is interested in controllable potentialities and is quick to call them values, but it does not follow that the true nature of value is brought out by such preferences. On the contrary, in a concrete situation, it is not forced or unnatural to say "sunshine has value for the growth of trees and flowers," or "coral polyps for the production of islands," quite regardless whether or no these things are desirable from any human standpoint. And such instances should be adequate to show the undue narrowness of the subjective criterion.

If we examine certain related terms an interesting fact appears. If a thing has value, it is valuable; but in the case of potentiality, there is no correspondingly allied adjective, for "potential" is not related to "potentiality" as "valuable" is to "value"; potential relates to the effect to be realized through the potentiality possessed by something else, but valuable means to possess the value. The potentiality of the egg is in relation to the chicken that may come out of it, but the potential egg is quite a different thing, yet the egg is at once a value and valuable in relation to the chicken. Again, with the assertion that a thing has value, there trembles on the lips the question, how valuable is it? But it is only torturing the meaning of the word to ask of a potentiality, how potential is it? In other words, value relates to the adequacy of a thing to the realization of an effect, whereas potentiality relates to the thing as contributing to the realization, without reference to its adequacy. Adequacy is an objective attribute of the situation in question, and, if value is to be defined in relation to potentiality, we might say that *value is degree of adequacy of a potentiality to the realization of the effect by virtue of which it is a potentiality,* or, put more concretely, *the value of an object consists in the adequacy of its qualities in reference to the realization of a specific effect.* Of course, the degree of such adequacy need not be numerically estimated, and need not be specifically defined, but the possibility of such estimates lies, nevertheless, behind all instances of value. Values are not, then, a subclass of potentialities, for the two concepts are mutually implicative in that the situations in which they arise are identical. They differ in that they refer to different aspects of the situations; potentiality, the factor through which the effect may be realized and value to the readiness of the realization. Nor does the definition mean that value is a relation, for I confess I can find little instruction in such phrases. Value only arises in complex situations where there are relations and is a name for a describable aspect of such situations, but the value is no more the relation than it is the thing, and to try to reduce it to one or the other is a highly unwarranted over-simplification.

But an even more pernicious over-simplification appears when one attempts to lump all values together as subjective or objective. The subjective alternative is given peculiar plausibility because of a confusion due to the differentia of values. Adequacy is easily confused with the feeling of adequacy and interest in that adequacy and, in consequence, value is taken to depend upon the behavior of a conscious subject or at least upon an "organism in the whole organism-environment situation." The latter alternative, to be sure, avoids much of the psychological difficulties in formulating a definition of consciousness, but with the glamor of consciousness gone, the classifi-

cation of *all* values as subjective is hard to understand unless it be the result of exclusive attention to the normative sciences of tradition which deal only with types of value already selected by human interest. But there are values as truly objective as these are subjective, although it should be noted that even this subjectivity is nothing but a special case of objectivity, namely, that objectivity in which a particular object, the organism, plays a leading rôle.

Let us examine a particular case of these subjective values. A sunset charms me to-night, but if I had seen it last night when I had the blues, it would have been repellent. Therefore I say the sunset's value is subjective with respect to its esthetic character. But what does this mean? That the sunset in one environment-situation contributes to the realization of one effect, and in another, to the realization of quite a different effect. The sunset has remained, by hypothesis, the same sunset, and its potentialities, as sunset, are unchanged, but my organism—in both cases the environment—was first in one state and then in another and its potentialities changed accordingly, and to call the esthetic value subjective refers merely to this fact. In other words, the difference between the values called subjective and those called objective is that while the latter may reside in the potentialities of one object or of a group of objects, of which the organism is not one, the former demand at least a pair of objects of which the organism must be one and the primary variable of the group. Ontologically, subjective values are a sort of objective values differentiated by the fact that an organism plays a leading part in their variation.

It happens that organisms plus environments constitute the necessary conditions for the realization of a large number of effects most interesting to human beings, and as a change in either the organism or the environment modifies the character of those effects, we seek to discover whether it is the organism or the environment that is primarily responsible in particular situations; that is, to observe which is, as a value, the greater. But we can not express this situation well by attributing subjective value to an objective part of the complex, by calling the esthetic value of the sunset subjective, without causing confusion of thought. Indeed, it may well be that the peculiar lack of interest in esthetics, and its peculiar unsuccess among philosophical studies, is rooted in just this confusion. If the concrete expression should be that an effect-value in a certain situation is determined by an organism through its major contribution to the realization of that effect, the fact that a certain object possesses esthetic value for me is not so much a comment on the character of the object as on my own condition and the possession of a certain sense of beauty becomes an indication of the life status of the possessor.

If we grant that a certain situation requiring organic cooperation for its attainment is desirable,—and such an admission must always be an hypothesis based upon anticipatory experiments in the thought of an individual,—the problem of the normative sciences becomes, what sort of an environment and organism would be adequate to attain it? And being practically interested, we limit ourselves to an attainable environment and possible modifications of our organism in approximation to the desired result. And there is always the corollary problem, how are these modifications of the organism and the environment to be brought about? The scientific study of such questions involves, of course, a selection from all values of those subjectively interesting, but not necessarily of exclusively subjective values, even in the sense in which the subjective is a species of the objective. For even the assumption of the desired end, however socialized the selecting individual may become, is only an expression of organic fact.

We have yet to ask, does our definition imply that there are no absolute values? The problem of the absolute or relative character of value is often confused with that of their subjectivity or objectivity. If this identification be accepted, the above account is sufficient to show that there are values wholly objective, or absolute, and values, in a sense, subjective, or relative. But the point of the distinction of the absolute and relative is not kept by this identification, for "absolute" intends to mark out an abiding standard for reference. An effect, through the potential realization of which a value exists, is the standard, and such effects, as we have seen, may be independent of an organism or dependent upon one, but it is at least dubious to assume that the non-organic in relation to effects is eternal, while the organic is transitory. The one may be relatively more abiding than the other, but an eternal value could only appear in a world where

> "Change may come not till all change end."

Such may be the world of a philosophic absolute being, but the study of concrete values seems to give no evidence of such a world, however glibly values may be deduced when such a world is once assumed.

But absolute is also taken to mean (1) independent of any limitation, (2) finished or perfect, and (3) capable of being conceived by itself alone, and it is *à propos* to inquire whether in any of these senses, also, there may be absolute values.

In the first instance, it is only value as an abstraction that may be absolute, for any concrete instance of value is a value limited by the potentialities of the thing possessing value. Thus the problem of the reality of absolute value in this sense is the problem of the reality

of abstractions which introduces logical considerations beyond the scope of this paper, but I suspect that if the abstractions are sufficiently purified to be absolute, they may turn out to be like the coins of M. Anatole France's needy knife-grinder from which have been effaced all images, and which, because they contain nothing English, French, or German about them any more, are no longer worth five shillings, but are of "inestimable value and their circulation is extended infinitely." Such abstract values may be glorious, but they are hardly interesting.

The first sense of absolute is near the third, the absolute as that which can be conceived through itself alone, but now it is the concrete sense of value that may be absolute, and the abstract that is relative, for abstractions are conceivable only through the concrete from which they are abstracted, but a concrete value, the value of a glass of water to statisfy my thirst at the present time, is surely conceivable without the aid of extraneous fact and, therefore, conforms to the condition laid down for absolute value. The plurality of the facts is no slur upon the absoluteness of the value, for the conception is really thirst-satisfying-glass-of-water-value, in which the facts are all incorporated.

In the second sense, as perfect, values may also be absolute, whether concrete or abstract, and, indeed, every object must be possessed of some absolute value in this sense, for in so far as it possessed uniqueness it has some potentiality possessed by no other object, and is the perfect possessor of the corresponding value, in the sense of possessing it accurately and adequately. This perfection is, of course, hardly spectacular. It means merely that the object-situation from which the definition of the value is derived lives up to the definition obtained from it. The distinction is only of importance when coupled with some theory of uniqueness and individuality such as idealism formulates regarding its Absolute Being.

The problem of absolute value is also sometimes confused with that of intrinsic and extrinsic value, the former being classified as absolute, the latter as relative. The distinction is based upon a specific relation between the potentiality of the thing valued and the effect with respect to which it has a value. If the effect appears as a development of the thing itself, or as guaranteed by the thing itself with the addition of such factors as space and time alone, the value is called intrinsic or absolute. Thus the egg as a potential chicken, or gold as a desirable medium of exchange, are intrinsic or absolute values, but the egg, as a chicken dinner, or a banknote as a certificate of deposited gold, are only extrinsically, or relatively valuable. The dividing line is, however, not always easy to draw, and the intrinsic is sometimes identified with the object's character as representative

of a class in the sense that a parsnip may be intrinsically of great value as a parsnip, but extrinsically of small value as an article of food.

The concept of value has now been reviewed in its most significant aspects, but before leaving the discussion there is still one form of the definition of value that must be commented upon, the definition of value in terms of purpose. If the present use of potentiality as a starting-point is accepted, it must appear that such definitions involve a *hysteron proteron,* or at least that they beg the question of the subjectivity of values unless the concept of purpose be given some cosmic significance that expresses a hope of the theologian rather than an induction of science.

In the first place, if we turn to the question of logical priority, we find that it is quite unintelligible to speak of purpose without the presupposition of something purposed, but in order that there be such a thing, there must be in our environment potentialities looking toward the realization of the thing. Further, there must also be potentialities of modifications in the organism which, taken in conjunction with this environment, seem to guarantee its actuality. The recognition of this environment-organism interaction is the recognition of a value of the type we have called subjective, and pleasurable or unpleasurable reaction to such perceived values is that selection or rejection of them that we call purpose. In other words, purpose does not generate values, but purpose is itself a reaction of an organism in a world of values whereby some of them are selected or rejected because of our feelings toward the effects with respect to which they are values. Take the purposive act of looking at a watch to learn the time, as an example. The watch, the pocket, the hand, each has many values; the watch, with respect to the pawnshop, as a missile; the pocket as a storehouse for articles, as a place to put the hand when embarrassed; the hand as a means of running a typewriter, etc. Being in a state of unrest, it is perceived that certain of the watch-hand-pocket values in conjunction with the present organic condition can lead to a state of peace devoutly to be wished, and the selection of these requisite values is the purposing of the action through which the end is realized. Purposive action, then, presupposes values, but doubly selected ones, for in the first place, the selected values must be subjective, and in the second place, desirable; and purpose is only possible because we live in a world where there are objective as well as organic potentialities generative of values amongst which we can select for the sake of realizing effects which are somehow presented to us as desirable in anticipation.

There are also certain interesting interpretations of consciousness resulting from this analysis of value in terms of potentiality, as well

as certain comments on the division and nature of the normative sciences that should be developed, but to enter upon this here would extend this paper unduly, and therefore they must be left until a later date. Our problem was primarily one of the clarification and precision of language, but it is hoped that it has not been wholly unilluminating as to the status of certain facts. Whatever facts may be, this much is certain; it is only through words that they can enter deeply into our thinking and, therefore, the reconsideration of the meaning of words must be the necessary foundation of sound thinking both in philosophy and in science.

HAROLD CHAPMAN BROWN.

COLUMBIA UNIVERSITY.

PERCEPTION[1]

WHATEVER perception may be, it is obviously something that has reference to living organisms. It is a term applied to a phase of organic or living behavior. If, then, we first set out the various fundamental types of behavior characteristic of living organisms, we shall be in a position to find a context for the proper study of perception. Observation discovers three basic types of organic action, *viz*, involuntary, reflex, and voluntary. Involuntary and reflex action are different in that the latter occurs only in connection with a disturbance in the organism's environment, whereas the former continues rhythmically (though with variations) under all conditions. They are alike in that they are practically determinate forms of activity which can be almost as easily foretold as sunrise and sunset.

Voluntary action occurs under conditions so variable that it is impossible to foretell what the behavior of the organism will be. It is evident that we are trying to describe voluntary action in terms of observation from without. Is the description adequate? Is it true that it is impossible to foretell the organism's conduct? It is true, but not true enough. Though we can not say what will be the particular act, we can foretell with fair certainty what the eventual consequences of the act will be. It may seem absurd to say that we do not know the act, but do know its consequences, yet this may in a sense be true. We know the general direction, tendency, or end of the organism's activity, but we do not know its means in each instance. Now what is that direction or end? It seems to be incapable of description in terms more explicit than the self-main-

[1] Read at a fortnightly conference of the officers and students of the department of philosophy of Columbia University, on December 1, 1913.

tenance of the organism and its continuous progress through a process of change. Thus we may speak of the cycle of life of a chicken or a dog as Shakespeare speaks of the stages of man. While we can not say what will be the particular events in the life history of any of these organisms, we feel quite certain that whatever may happen to it, and however much any event may divert its course, the eventual consequence will be the return of the organism to its vital path—otherwise there is disaster and death. Here we come upon the chief differentium of life expressed in terms of objectively observed behavior, *viz,* purposive conduct, where by purpose we mean the maintenance of an uniquely equilibrated activity in a particular direction in time.

Now we are in a position to ask and perhaps answer some pertinent questions about perception. Had we begun with perception at the outset of this paper, we might have been led, innocently enough, to ask how perception is possible, how it can be valid, what its content must be and whether that content is real or not. By our method of approach we have avoided the pitfalls of artificial problems. We have come upon our difficulty naturally, for we are confronted by a real situation which we are trying to understand and describe. We see living organisms maintaining their characters and pursuing their careers despite many distressing obstacles; we see life existing and operating in the face of innumerable opposing forces. How is this managed? is a problem generated naturally by the situation before us. The answer is that the basic means is the process of perception.

Perception is, then, a process of a living organism that enables it to solve the problems set for it by its environment. It is a process of adjustment to the advantages and disadvantages, values and disvalues of the situation in which the organism fulfills its career. We shall presently discuss the mechanism of perception, for we already understand its function. And the knowledge of its function saves us from the discussion of unreal problems about it. We see that it is a process, an act, and we do not ask questions that would be relevant to knowledge or states of mind or consciousness, but irrelevant to perception as action. Perception is an act of adjustment, and in the sense in which we have defined purpose it is a purposive act. The adjustment is not purely mechanical, for it has reference to past and future time. If I stand erect, and you come behind me and seize my arms and jerk me backward, I fall. Yet this is not adjustment; a dummy used in football practise will do the same. But if you come again when I am in the same position, and hearing your footsteps I turn around to confront you, my act is adjustment. My turning around is not the necessary mech-

anical consequent of the noise made by your approach. That I do turn around is explicable in terms of the present situation (stimulus), the past (experience), and the future (purpose).

Let us imagine an experiment with two figures, alike in every detail, one of which named M is a machine, while the other named X is a human being. Suppose that the machine is so ingeniously constructed of steel and wax as to be sensitive to light and sound, while Mr. X is uncommonly dull and expressionless. Now let us test them to see which is animate and which inanimate. We flash a light and both close and re-open their eyes. We set off a giant firecracker and both jump as the great noise is heard. We are limiting ourselves, of course, to simple tests in order not to make too great a demand on the mechanician's ingenuity. Must we abandon the experiment and confess our inability to devise a simple test to reveal life as distinguished from a machine? No, for we have as yet failed to take account of the essential factor in living nature, *viz, time.* Let us repeat the loud noise at short intervals. We observe that figure M moves with perfect ease and precision, whereas X is not so certain in movement. One of our observers remarks that figure M which works so smoothly must be alive, for it functions so well, so much better than its neighbor. But we continue to repeat the sound until presently we note that M jumps as unhesitatingly and easily as ever, while X does not move at all.

By this time the result of the experiment is obvious to all, even to him who mistook efficiency for life. We infer correctly that figure M is a machine responding regularly and inevitably in a definite way to a given stimulus, whereas X, who responded in various ways and now does not react at all, is a living being. Now all that we had to connect X with the noise was a process of sensitiveness to sound. There is no knowledge on his part of anything that occurred, for things were so arranged that we could observe him without his observing us. He can not be said to have directed his conduct by any idea, for whatever may be the efficiency of an idea, the conditions for its development were not present.

How then shall we explain his behavior? How does he come to respond variously to the same stimulus? This trait of varied response is the other side of what we noted as the mark of life, *viz,* purpose. Purpose may stand for the end in any segment of the current of living conduct, and variation of response may be regarded as the means. Let us now fit means to end; let us inquire into the mechanism of perception as manifested in our experiment. When the giant firecracker was exploded, air vibrations were set up which pressed against X's body, especially against his ear-drum. The pressure was then transmitted successively to the oval window,

lymph, cochlea, hairs, and the fibrils leading to the auditory nerve. The nerves conducted the movement to some center in the spinal cord or the brain, from which center the movement was in turn conducted to certain motor areas such as the leg muscles. The leg muscles contracted and X jumped. There was evidently an inherited structure which permitted an immediate and coordinated response to the noise. But the process we have described is much too simple to account for the act of jumping, for the body needs to be held in a certain way; arms, neck, abdomen, etc., have their part to play in the act. The stimulus coming in by way of the ear must have been discharged to many parts of the body. Nor was the body at rest when the sound was made. Many processes were going on, such as breathing, beating of the heart, gazing around the room aimlessly, which were noticeably affected by the change induced by the sound.

There is obviously no mechanical equivalence between the energy of the sound and the energy expended in the jump. And some have thought this fact of excess of energy in response over stimulus to be the distinguishing trait of organic behavior. But observation of nature reveals similar occurrences in the inorganic world, where by a slight shock nitro-glycerine is decomposed into water, carbonic acid, and nitrogen, the process being accompanied by a powerful evolution of energy. It is true that a slight stimulus will often initiate a great reaction, but there is no miracle in this. It is simply a way of saying that the organism is a storehouse of a large amount of potential energy which will be released whenever necessary by any proper stimulus, however slight. In the case of X we note that the effect of the sound pressing against his ear-drum was to release many tendencies in his body and to disarrange or rearrange its processes.

Now is this perception? Have we explained the situation adequately by describing the physiological structure that connects sound with jumping. Obviously not, for to stop here would be making a mystery of stimulus and response. What is this sound that is said to have made X jump? It did not make us jump even at the beginning of the experiment, and at the end it did not visibly affect him either. Is it not obvious that in perception, at least, the sound made by the explosion of a firecracker is to be judged according to its contextual relations? In a certain sense it was the same sound that we all heard. In the light and fulness of present knowledge (and this changes in the course of time) we can study the sound retrospectively, and then we come to agree that in the context of this knowledge, by means of which it is interpreted, the sound is a definite fact, and the same for all of us. But was it the

same for us all when it happened? Experience is insistent on this point, in showing that sounds, smells, tastes, etc., are very different for various persons at various times. Then if X and you and I did not have precisely similar perceptions, what is the cause and mark of difference? Or, to come to closer grip with the problem, what was the difference between his relation to the sound heard first and the sound (agreed by us to be exactly similar) he heard last? The first made him jump, the last made him disgusted. It is clear that we are dealing with relations, the relations of an organism to a series of vibrations. What is this relation? Relations are manifold and it would be useless to go through a list of them to show what this relation is or is not. Let us say directly that this relation is one of *meaning*, a relation peculiar to living organisms in their dealings with their environment. What Mr. X perceived was not so many vibrations of air per second, but the meaning to him of the environmental situation. To him the event meant danger, and as it had meant the same for a long line of ancestors, it had, by the reactions repeatedly called forth, formed a structure or system in his body that enabled him to respond immediately to the stimulus.

Had X's response, the jump, proved satisfactory, we would not have noted in this particular case any change in behavior from rapid movement to none at all. But the jump was not satisfactory, *i. e.*, it was not itself a value, for it did not lead to further responses. If the sound had fulfilled its meaning (say by the presence of a lion), X's jump would have been followed by running or fighting, all in a continuous succession wherein every element has its meaning or value by what precedes and follows it, *i. e.*, by its place in the continuum. But the jump was a disvalue in that it cost valuable energy without becoming a means to further action. The condition of the organism after the jump was one of dissatisfaction. Not that X was not happy to find himself unharmed. But compare his feeling to what it would have been (and was in the case of his ancestors) had the jump led to flight and finally to escape and victory. "Ah," he could say, "that was a fine jump, and didn't I run fast!" How he would have exulted in every precious moment of the hard-fought battle! But here the jump led nowhere. It was like the golden apples that turn to brass in your hand. It cost so much to attain and was worth so little. It was a *means* to nothing and it *meant* nothing.

On its physiological side the situation is probably as follows: The energy released to the motor areas, especially to the leg muscles, is of a quantity large enough to start the full movement, jump—run, etc. But there is a break in the motor phase of the activity. There is no running, or very little of it, and the result is

a back-up of energy in opposition to the direction initiated by the sound stimulus. This back-up and the resultant conflict cause a degradation of the system. The structure gets shaky, so to speak, and the next time the sound is heard the paths of discharge that were formerly so free are now somewhat clogged. The sensory situation when the last sound in our experiment is heard, is such that discharge is no longer to the motor areas, but to other centers which *do* lead somewhere, say to esthetic appreciation. We see thus that the air vibrations which first meant danger now mean something totally different. The perceiving process not only relates us to what affects us at the moment, it is not an instantaneous carving up of the environment, or arresting of a limited portion of the surrounding flux. *Perception is a temporal process that opens up new things to stimulate us. It is a progressive discovery of values or revelation of reality.*

We have been considering a situation which, however plausible, is not characteristic of perception, and it may therefore be well to study an example of perception in daily life. Suppose, then, we ask what happens when one sees his friend enter the room. What is the content of the perception,—is it a man one sees or merely a reflection of one's own consciousness? Suppose that as soon as one sees him one goes over and shakes hands with him. Of course no one would claim to be shaking hands with a meaning, and if it is a man one shakes hands with, it must be a man that one saw. Moreover, one could not have gone to greet him without having seen him first; ergo, one saw a man, a physical entity having no smack or taint of meaning about him. Let us test this situation. When the friend stepped in, light reflected from his body, dashed against the eyeball of his host. Now it is imagined by some that at this point in the process of perception an image of some sort is impressed on the retina and is then conveyed somehow to consciousness. But the facts are different, I believe. There is no image in the retina until the light stimulus, having first reached an appropriate brain-center, is discharged back to the eye. The eye must be accommodated for the seeing of the object from which the light stimulus comes, and this accommodation is directed by cortical control. But even when the circuit has been established, there is no sight of a man. At most there is movement of the eyeball. But the man that one sees is tall and solid; he wears a rough cheviot suit and smooth gloves, all of which one sees contemporaneously with the sight of his blue tie and pale cheeks. The roughness and smoothness and solidity are evidently tactual data in perception, and if redischarge were only to the eye there would be no perception of a man at all. However, the organism seems to be wiser than some of its philo-

sophical critics. The incoming charge reaches centers of the spinal cord and brain, and from these centers rediscbarges are made in various directions, for example, to other centers and to a number of peripheral sense-organs. The call that reaches the organism by way of the eye is communicated to other agents in the communal enterprise of perception. If there is to be any perception at all, it must be accomplished by the cooperation of the various senses and neural centers.

Successful cooperation is dependent upon a proper coordination of the sensory reactions. What are the conditions of this coordination? Simple observations of infants show how coordination has to be *learned.* They kick and fling about and roll their eyes and turn head and body at every stimulation. The frequent presence of the same stimulus results in coordination becoming more easily and rapidly effected, till presently the child perceives immediately —he sees a person completely, at once. But this is at the cost of many previous trials in the course of which the coordination grows better and better. Yet is it proper to regard the coordination as fitted to the act of seeing? Has the child learned laboriously to coordinate merely to see or recognize or know his mother? This is contrary to the facts of life where the organism finds the object of perception a value or disvalue. There is no consummation in seeing. Seeing or perceiving generally is for further action and is conditioned by the history and destiny of the percipient. The perception is conditioned by the quality of the sensory situation *before* and *after* the perception.

So, in the case of the friend whom one sees as he enters the room. In a sense one sees the greeting as much as the friend. For the light stimulation from his body sets up a sensory condition which has its roots in one's previous experience with his friend. There are movements of the eyes and legs; there are neural currents and cross-currents in various directions. What is the quality of these movements and how are they correlated? Is the situation one of conflict and interference or is it one of progressive coordination? Perhaps the conflict of the various elements in the sensory situation is such as to inhibit any response—this means that there is as yet no perception. Perhaps partial responses are being effected, tending to bring about the coordination requisite for a total or complete response. When the coordination occurs, a deed has been accomplished that may be termed variously as perception, or selection of stimulus, or choice of response. In other words, the organism, *disturbed* or threatened or aided by the environment, has restored its equilibrium, has regained the track of its career.

Now we have been trying to show that the sensory situation

of conflict or of harmony is not a chance affair. Its conditions may be analyzed and enumerated as (1) organic equilibrium, (2) organic momentum, (3) organic reserve tendencies, (4) the organism's biography or past experience, (5) its purpose. The present sensory situation is a *forecast* of my future movement, for that future movement will be the outgrowth of factors operating in the present situaion. But this situation derives its character from the organism's experience of the *consequences of its previous responses* to disturbances of this sort. Former consequences of organic action have so affected the organism that its present activities have a tendency to attain or avoid certain consequences of its own behavior, or, in other words, to develop certain values by its own conduct.

When, therefore, the coordination takes place, the perception on its mental side is a feeling of my present organic attitude, which is what it is because of my experience and my purpose. The perception is thus an *anticipation* as well as a recognition. The friend whom one sees is the friend who was a value or source of happiness yesterday, and who will be the same presently. In seeing him one has a feeling of the outcome of one's present organic attitude, an anticipation of the consequences of his conduct—his developing response to his developing stimulus. Stated differently, perception is a cardinal point in a process of selecting a stimulus and response, neither of which could be chosen separately, and both of which have their mental aspect in a feeling of anticipation.

The organism is constantly gambling with the odds as much in its favor as it can manage. It does not respond without an interest in the outcome of the response as a source of further stimuli to further action. It is always in a situation of stimulus—response—stimulus, a situation which though compelling the organism to react somehow, yet permits it to react intelligently, by affording an opportunity for choice. Perception is a process of choosing, for it is the intermedium between the organism's present stage and the stage which it desires to attain. The organism may experiment with its environment in order to determine the various steps in its forward march. But experiment is too dangerous, if the whole organism is to be risked in testing every situation. Why not develop a mediating process, a sort of buffer, whose function it shall be to experiment with disturbing stimuli, and thus to presage in the presently operating organic situation the quality of the possible consequences of organic action, while these consequences themselves are yet undetermined? Here is opportunity for choice. The organism, having felt the consequences of its conduct, in a part of itself, a part that stands midway between it and its environment, is free to determine what its behavior as a *whole* shall be.

A perception is then definable as a choice of a stimulus and response in view of selected consequences to which they may lead. The friend one sees is the friend one expects to greet, who will greet one warmly, and with whom one will spend a pleasant evening. None of these expectations is necessarily known as such. Here it is important to recall that perception as we have been limiting the use of the term is not a state of mind, or a fact of knowledge, but primarily a fact of organic action. Suppose an indescribably strange creature to enter the room of a person who is resting on a couch. Observe his behavior as soon as his conduct appears to be a function of the strange visitor's presence. Does he remain quite still, does he approach the intruder, or does he flee? We notice that his eyes shut and reopen quickly, his fingers twitch and are clenched into a fist, his limbs shake—in short, he appears in a number of conflicting attitudes of attack and defense. These attitudes have their counterparts in many partial responses that are taking place within his sensory system. Of the many tendencies that are contending for overt execution one becomes dominant and a coordination of the sensory system is effected—now perception takes place. The invader has uttered a loud shrieking sound, and his frightened victim hides under the couch.

When asked later by a friend why he is so cold and pale, he says that he ran away from a ghost or what-not. When his friend suggests that it was a witch he assents; when told that it must have been Mephisto, he says, "Certainly." Then his friend discloses that it was himself playing a trick on him, and when he has regained his composure he says, "Why of course it was you!" and they go over the details of the experience. It is clear that neither friend nor devil entered into the experience when it happened, but it is easily reconstructed retrospectively. What occurred was a feeling of an organic tendency to flee from a presence that had a meaning of dread, an anticipation of harm. Action and perception took place, but there was hardly anything that could be called knowledge.

Now what is the relation of perception to knowledge, on one hand, and to action, on the other? Perception is not a knowing, not an idea; neither is it a complete overt act. Perception is a peculiar kind of action, *viz*, the organism's incipient act, its internal and partial activity leading *to* overt action and to knowledge. We have, of course, been discussing the process of perceiving. If we must employ the word "perception," let us limit its use to designate an organic situation, which on its motor side is a coordination of tendencies into a definite incipient action that is the mean between chosen stimulus and response, and on its mental side a feeling of anticipation of future consequences.

In assigning this definition to the word perception we are not doing violence to language, though we are dealing pretty roughly with "the genteel tradition in philosophy" that set up the elaborate outfit of sensations, images, ideas, states of consciousness, etc., in order to connect two parts of a complex, which are first artificially separated and then miraculously rejoined. In the view that we have been trying to explain the organism and its environment are in continuous and dynamic relation. The attitude of the organism to its surrounding material is fundamentally one of touching, gripping, etc., and is manifested in many forms of various degrees of refinement, such as taste, smell, hearing, and seeing. What better word could be used to denote this attitude or activity than the word "perceive" which originally meant, to seize or hold *through* something, or take possession of a thing thoroughly? The internal activity through which the organism takes thorough possession of its environment, by means of which it discovers the values needed for the fulfilment of its career—there you have perception.

ISAAC AARONSON.

COLUMBIA UNIVERSITY.

MISS CALKINS ON IDEALISM AND REALISM[1]

THE controversy between realists and idealists promises to be unending, partly because both parties are guilty of unconscious fallacies in their arguments, which remain undetected by their opponents. I think such a fallacy lies in Miss Calkins's paper, a fallacy which affects the root of the matter (the quotations are abbreviated for convenience).

"The realist" says Miss Calkins "describes an object as yellow. Some one may deny the yellowness. This throws the realist back on what he directly observes, what he knows with certainty—that he is having a complex experience described by the term yellowness" (p. 603).

There is a fallacy here in stating the true position of the realist, and as it is a fallacy often acquiesced in by realists themselves, it may again have escaped detection. The final sentence, so far from being unchallengeable, verges on the absurd. If the original assertion made by the realist be denied, he is undoubtedly thrown back, like every one else, on what he directly observes; that is his final court of appeal. The questions, then, are, What does he observe? Of what is he certain? and no realist can, or should, accept the answer to these questions put into his mouth by Miss Calkins, who says the realist "is having a complex experience described by the term yellowness."

[1] This JOURNAL, Vol. IX., page 603.

Now to "describe an entity by a term" is to assert that the entity is of the character, or has the quality or attribute, denoted by that term. If I describe this journal by the term valuable, I mean it has the quality of value, I conjoin the entity with the character denoted by the term; so that what Miss Calkins does is to make the realist assert that his experience has the character of yellowness. But this is not at all what the realist first asserted—he described the *object,* not his experience, as yellow, and Miss Calkins brings forward nothing which can make him change his standpoint and modify his assertion.

In making the realist say that he has an experience described by the term yellowness, Miss Calkins does one of two things; she either (1) identifies the object of the realist with his experience—regards the statement "this object is described by the term yellowness" as identical in meaning and final implication with "my experience is described by the term yellowness." Or (2) if she does not so identify object and experience, then she regards the realist's assertion, "the object is described by the term yellow," as enabling and justifying her to say that, therefore, his experience is described by the term yellowness—to argue from the one to the other.

The realist can, however, controvert both alternatives. Miss Calkins herself seems to adopt the first, for we have (p. 605) "yellow *is* a certain experience which a self has, just as any relation *is* a self-in-its-relating—a self as knowing"; this is a type of terminology frequent among idealists. I can never succeed in understanding the second form of it; "any relation is a self in relation" seems to identify part with whole—surely the self in relation is something more than, and essentially different from, the relation merely.

Take an instance outside philosophy, and we quickly get a *reductio ad absurdam.* "Any relation is a self in relation." Marriage is a relation. Therefore, marriage is a person married! and more generally, a relation implies the terms it relates, and can in no sense be identified with either of its terms.

In its first form (yellow *is* an experience) it can be accepted by realists only with very careful and accurate definition and explanation, if it is not denied altogether. The point lies in the exact sense in which the term experience is used and understood.

I suppose realists and idealists will alike accept the assertion "I am conscious"; and if I am conscious, I must be conscious of something; or since the word "thing" has already a definite usage and implications, let us say "I am conscious of some entity," where "entity" merely denotes what I am conscious of and carries here no implications whatever as to its nature.

Now it is possible to use the word experience in one of two

mutually exclusive and incompatible senses. (*a*) I may choose to say "I experience an entity" in the sense, and instead of, "I am conscious of an entity;" we do this commonly, *e. g.*, "I experience an emotion, or a desire, or a determination." It is less usual and more questionable to say "I experience an orange." But with this construction of the word, in neither case can we say that the entity is the experience, even if it be experienced; we can not identify or confuse the entity which is experienced with the experiencing of the entity; we can not say "yellow *is* an experience," even if we admit the expression "yellow is experienced"; for that would be, on this interpretation of experience, to identify what I am conscious of with my being conscious of it. (*b*) On the other hand, we may use experience to denote the entities of which I am conscious. Here again we find a common usage, as when we say "my emotions, or pains, constituted a terrible experience"; and here again it is less usual and more questionable to say "the objects and qualities I perceive are my experience," but in this case it is still less legitimate to identify "experience" as denoting what I am conscious of, with my being conscious itself.

Hence, if realists admit the expression "yellow is an experience" it can only be in sense (*b*), meaning yellow is something which is experienced, which I am conscious of. Nor can idealists derive any controversial advantage from this admission, because to admit that an entity is experienced in sense (*b*), implies in itself nothing further about the nature of the entity; neither idealism or realism, unfortunately, has any *a priori* foundations; the nature of the entities still remains to be determined. We can not at once go on to say, as Miss Calkins does (p. 604), "yellow is a way in which I am conscious." The utmost we can say is that "seeing yellow is a way in which I am conscious"; but "seeing yellow" and "yellow seen" are two entirely different things.

On the other hand, if Miss Calkins does not identify object and experience, she can not ignore the realist's original assertion (which was that he described the *object* as yellow), and substitute for that that his experience is described as yellow. To transform the argument is not to rebut it. The realist will adhere to his original assertion (provided he really is certain of what he is conscious). He will say, if his assertion be denied, "the object is yellow, for I am certain that I see, or perceive, or experience, if you like, it is yellow. But my seeing, or perceiving, or even experiencing this, is certainly not to be described by the term yellowness. I can not understand such an assertion. I can not conceive seeing or perceiving, as a visual process, or experiencing as a conscious process or relation, to be described

by the term yellowness—that is an adjective applicable only to material objects, not to the process of their cognition."

J. E. TURNER.

LIVERPOOL, ENGLAND.

REVIEWS AND ABSTRACTS OF LITERATURE

Enjoyment of Poetry. MAX EASTMAN. New York: Charles Scribner's Sons. 1913. Pp. xi + 224.

The excellence of Mr. Eastman's book is its unusual vitality. No reader is likely to come from it with indifference. Whether it will "increase enjoyment," as it is intended to do, remains to be seen. If the reader is a scholar, or if he has thought much on the nature of poetry, he will be puzzled and offended by the smartness, one is tempted to say the boyish wilfulness, with which Mr. Eastman continually drops his subject and takes a shot at trained or organized investigation of truth. "A misfortune incident to all education," he says, "is the fact that those who elect to be teachers are scholars." Much in the book, unfortunately, will increase the enjoyment of those who like to see scholarship chastised, and who like to see that "art of life" exploited which consists of doing and believing what one pleases. But Mr. Eastman might take his defense from his own pages. In the chapter on "Realization of Things," he quotes Edward Carpenter's "Little Brook Without a Name," which he considers "one of the very precious poems of recent times": "The little mouse, the water-shrew, walks (*even like Jesus Christ*) upon the flood, paddling quickly over the surface with its half-webbed feet." Commenting on the art of shocking, here illustrated, he says: "Such extreme measures are at times indispensable to the sustainment of poetry. Something has to explode. Our souls must be invaded and ravaged, so ponderous is their lethargy in which they apprehend only vague presences and general bearings of things. Sing 'Lord! Lord!' forever, and you rouse no hearts to repentance; but shout 'Sky-Blasting Jehovah!' and some necks will move." Mr. Eastman teaches us in the key of "Sky-Blasting Jehovah!" and his book is vital—our necks do move.

And he does teach us. I feel bound by my own devotion to poetry to state at once the unfortunate twist in the book which will probably alienate most scholars; to state simply my great admiration for the new and sound things in the volume might imply some agreement (whereas I feel none at all) with Mr. Eastman's judgments of scholarship and science. But once this discrimination is made, his doctrine is immensely suggestive. The heart of it is in the first chapter, where he defines the poetic temperament as the disposition to realize the flavor of life, to taste the quality of experience rather than to control it. This poetic tendency holds in all kinds of living—in the senses, in memory, in the intellect. Simple as the definition is, and old as it is, it takes on extraordinary vigor in Mr. Eastman's handling; this brief chapter may well provide a turning-point in the mental life of many a reader.

This definition of what is poetic, it should be noticed, is from the standpoint of one who experiences poetry, but does not create it. The book would have been more effective if it had all been written from this point of view; the title certainly leads us to expect as much. We should not then have been puzzled by the chapter "To Compose Poetry." To be sure, we should have missed its encouraging first sentence—"The knowledge needed to create an English rhythm, the only general knowledge there is upon that subject, may be acquired while one converses about it"; but we would gladly exchange that encouragement for a chapter on how to read English rhythm after it is created—a far more difficult and necessary step toward the enjoyment of poetry. It should also be noticed that this definition of what is poetic is as good for music or any other art as is is for literature. Yet when Mr. Eastman begins to apply it more closely to literature, the art he is for the moment concerned with, he limits the definition so that it can no longer apply to music, not even to verbal music, but only to the arts which present or suggest pictures.

This narrowing of the definition appears in the second, third, and fourth chapters, in which the distinction is made at some length between the "language that chooses" and the "language that compares." Illustrations of the first kind are, *winter squash, Canada fox, ball-and-socket, office building, steamboat, railroad, money-saver,* and *motor-cyclist.* Illustrations of the second kind—the poetic kind—are, *blue-eyed grass, golden-rod, fire-bird, dovetail, sky-scraper, ocean-greyhound, pinchpenny, rake-hell, swashbuckler, spitfire, kill-joy,* and *slipgibbet.* The obvious difference between these lists is that the "poetic" words all are metaphorical, and the others are not. We begin to see that to Mr. Eastman, as to Mr. Hudson Maxim, poetry is simply metaphor. We notice that the verse illustrations quoted in the book so far are from poems richer in images than in music; we are prepared for the statement (p. 36) that "poetic creation begins in us when we marry . . . the images of memory to the impressions of sense," and also for the statement (p. 95) that "poetry . . . is a series of pictures accompanied by appropriate music." The "appropriate music," the "vocal wonder" of poetry, is treated in the chapter called "Poetry Itself" as something which is "built up" by such constructors of verse as Tennyson, Lanier, Poe, Kipling, and Francis Thompson.

But where are the images or pictures accompanied by appropriate music in Tennyson's

> Better to have loved and lost
> Than never to have loved at all,

or in Burns's

> Had we never lov'd sae kindly,
> Had we never lov'd sae blindly,
> Never met—or never parted—
> We had ne'er been broken-hearted,

or in Paolo's words to Dante,

> *quel giorno più non vi leggemmo avante,*

or in Ophelia's answer to Hamlet, "I was the more deceived"? The fact is that Mr. Eastman has forgotten what to most of us is the very essence of poetry—he has forgotten the emotion. The poetic realization of life, that which distinguishes it from the practical realization, is a storing-up of passion which craves to be released. Mr. Eastman does not believe this, I know; he says (p. 51): "Words make the world grow—not, I think, because they express a feeling, for that means that they relieve you of it, but because they give to the feeling locality and distinct body." But which of us who has written anything, has not felt that words do relieve us of emotion? The mood is exhausted. A reader undergoes a similar though more leisurely exhaustion; after repeated readings of any poem he "becomes tired of it," and must lay it aside until he has stored up new emotions for it to express. He can not understand a poem at all until he has experienced the emotion it is calculated to relieve. In "Hamlet" we live through the experience which Ophelia's words express; we experience her devotion to the Prince, and when he says "I never loved you," we realize our own heart-break in her quiet "I was the more deceived." Paolo's narrative, similarly, has admitted us to a share in his tragic love of Francesca, so that the simple statement "That day we read no more," does justice to what is in our hearts. A dramatist or a story-teller prepares the emotion which he later releases in poetry; a lyric poet must assume this emotional preparation in the reader. But in all cases the poetic quality of the language consists in the adequateness with which it provides an outlet for the emotion. It may provide this outlet by an image, or by a verbal cadence, or by mere felicity of diction.

If Mr. Eastman had remembered that emotion, and not image, is cardinal in poetic expression, he would not have identified poetry with slang. It is tiresome to be told so often, especially when we do not believe it, that this or that vulgar expression is poetic. Slang is figurative, but never poetic. It never gives any one the uplift expected of poetry; it can not because it expresses no emotion. *To lean against the leather, to rap out a two-bagger, to zip it to the fence,* are according to Mr. Eastman, poetic expressions. Yet it is perhaps easier to believe that they were manufactured in cold blood than that they sprang out of the realization of life; for, like all slang, they save us the trouble, not only of feeling, but of thinking. Mr. Eastman might answer that slang, though it immediately does become formula, is not so to the man who invented it; to him it is poetry. That might be questioned; but Mr. Eastman would then be talking of the creator, not of the reader, and we should notice that from the standpoint of the reader slang, as soon as it is invented, becomes a mere formula, whereas poetry does not.

Also if Mr. Eastman had remembered that emotion, and not image, is cardinal in poetic expression, he probably would not have made those lists of poetic and of practical words; for surely he would not be understood to believe in an eighteenth-century poetic diction, a certain preserve of language whence the authentic words of poetry may be drawn. That critic would be bold indeed who would say that any word is unfit for poetic use; the genius may arrive at any moment who will make that

word the vehicle of emotion. Conversely, I am surprised that Mr. Eastman should list any words as though he could guarantee them to be poetic; it depends on how they are used. Is "sky-scraper," in the mouth of most New Yorkers, an expression of the flavor of experience, a conscious satisfaction in a Homeric image? or is it just a practical word, used for control?

Perhaps I have failed to indicate how highly I value this book. It has stimulated me to much thinking, and it has helped me toward setting my own house in order. If I object to his onslaughts upon the professional scholars, Mr. Eastman will not be surprised, since I belong in that camp. Like all else in his book, the onslaughts are interesting, and will, as I admitted, provide enjoyment for many readers; but I leave the book convinced that it is only the noblest kind of enjoyment that Mr. Eastman really wishes to provide.

JOHN ERSKINE.

COLUMBIA UNIVERSITY.

The Philosophy of the Present in Germany. OSWALD KÜLPE. Translated from the fifth German edition by MAUD LYALL PATRICK and G. T. W. PATRICK. New York: The Macmillan Company. 1913. Pp. vii + 256.

This is certainly a better book than popular expositions of philosophy usually are. It is small and readable. It is not, apparently, addressed to students of philosophy, but to the German reading public, and it was worth translating. That does not mean, however, that the philosophy it describes is particularly modern. The breath of really modern thinking does not seem to have fluttered these pleasant pages. Still, the title indicates the subject sufficiently well.

It was rather a happy thought to sum up contemporary philosophy in Germany under the headings of positivism, materialism, naturalism, and idealism; under each of these topics there is a brief exposition of the philosophy of its chief representatives, and a statement of their shortcomings. The expositions are clear, but in the case of Mach a reader has the impression that the author could not get the point of view he seeks to criticize: in general, criticisms tend a little to the reproach that the writers reviewed overlooked considerations that belonged to other systems than their own; the trouble is not that they did not do well what they tried to do, but that they did not do well what they had no intention to do.

Positivism is represented by Mach and Dühring, materialism by Haeckel, naturalism by Nietzsche, and idealism by Fechner, Lotze, von Hartmann, and Wundt. It is not surprising that materialism fares rather badly, and it is certainly a pity to define naturalism as something that can be illustrated by any writer who claims that his doctrine is a return to nature. The chapter on Nietzsche is well written in spite of the following quotation from it: "The sterner philosophical disciplines, such as logic and the theory of knowledge, Nietzsche touched upon only casually and never gave himself up to their problems with original interest; and in the other branches which he liked to cultivate, such as metaphysics and ethics, he has no exact results to offer. We can not call him, therefore, really a philosopher. Life was his

problem, and his heartfelt interest was the determination of life's value and life's problems. This is the only theme which his thought mastered, and this theme he was able with astonishing versatility of spirit to express in every form of variation from the lowest to the most ideal" (p. 128). Nevertheless, Nietzsche was not "really a philosopher." "But his own time will come. . . . Then we shall welcome his criticisms just so far as they point to actual evils. . . . Then we shall recognize in his judgments and descriptions the direct expression of an original and significant sensibility. . . ." One asks quite simply, "why not now?"

No one of the four schools of thought selected for analysis will be the philosophy of the future. That philosophy is most likely to result from the cooperation of positivism and idealism. Scientific empiricism has dethroned old-fashioned rationalism, but "neo-rationalism" will come to our aid. How else will philosophers of the future be able to lecture about the "world-riddle"? Many things in the book are neatly put. "Leibniz attributed to all thought, in so far as it takes place without contradiction, a real significance and objective validity. According to this modern doctrine [Mach], on the contrary, all thought is merely formal. In both cases the difference between mathematics and metaphysics ceases to exist, but in the first case mathematics becomes metaphysics, while in the second, *vice versa,* metaphysics becomes mathematics" (p. 242).

W. T. Bush.

Columbia University.

JOURNALS AND NEW BOOKS

ARCHIV FÜR GESCHICHTE DER PHILOSOPHIE. July, 1913. *Friedrich Rosens's Darstellung der persischen Mystik:* L. Stein. – A note calling attention to the reprint of Georg Rosens's translation of the Mesnevi, the greatest work of the Persian mystics. Friedrich Rosens, son of the translator, has contributed a noteworthy introduction to the new edition. *Platos Stellung zu Erziehungsfragen:* Dr. Jegel. – A painstaking and systematic presentation of Plato's teaching on education as found in the Republic and the Laws. The aim of Plato in education was to train the youth to be capable citizens serviceable to the state. *Bemerkungen zur Abfassungszeit und Methode der Amphibolie der Reflexionsbegriffe:* Edgar Zilsel. – The first section of the "Amphiboly of Reflective Concepts" in the "Critique of Pure Reason" comes from the year 1771; the second and third divisions are supplementary presentations of later years. The "Reflective Concepts" were uncritical forerunners of the "Categories." The first division accepts a knowable "Noumenon," the second denies it, the third recognizes it as the limit of that which may be known. *Kleitophon wider Socrates:* Dr. H. Brünnecke. – "Cleitophon" is a genuine Platonic dialogue in which Antisthenes is attacked under the name of Socrates, and the bankruptcy of the Cynic teaching revealed as preparation for the message of the Platonic Socrates in the dialectical com-

bat with Thrasymachus in the presence of Cleitophon in the beginning of the Republic. Philological studies corroborate this view, and show that the dialogue was written in the later years of Plato's life. *The Logic of Antisthenes, Part I.:* C. M. GILLESPIE. – An analysis of the passages referring to Antisthenes, and a statement of his views on logic. Hobbes's teachings are used as a basis of comparison. *Rezensionen. Die neuesten Erscheinungn auf der Gebiet der Geschichte der Philosophie. Beiheft: Die Wissenschaft Demokrits und ihr Einfluss auf die moderne Naturwissenschaft:* LOUIS LÖWENHEIM. – This supplement contains the introductory sections of a work whose endeavor is to expound the teachings of Democritus, and to show that he was the greatest figure in Greek thought, and the real father of our modern scientific period. This latter title he may claim since he was the teacher of Galileo who broke the homogeneous Roman-Medieval tradition and returned to the Greek type of thought, similarity to which characterizes the best work of our day. Löwenheim's exposition is marked by freshness of approach, and by singular freedom from tradition, but the evidence for his assertions frequently seems rather slender.

THE PHILOSOPHICAL REVIEW. July, 1913. *Philosophy in France in 1912* (pp. 357–374): A. LALANDE. – The topic of most frequent current discussion is religion and philosophy. There is given an analysis and criticism of Durkheim's *Les formes élémentaires de la vie religieuse,* the leading philosophical work of the year. Contributions to the philosophy of science are mentioned. French philosophy is poor in logical theories. *Identity as a Principle of Stable Values and as a Principle of Predication* (pp. 375–394): L. E. HICKS. – "The postulate of a stability sufficient to know things, to make assertions about them, to combine statements in a chain of reasoning, is not out of harmony with actual condiditions in a changing world. At the same time it is quite sufficient for both epistemology and logic." *Ethical Objectivity in the Light of Social Psychology* (pp. 395–409): WILLIAM K. WRIGHT. – Current psychological analysis has tended toward a subjectivistic account of moral standards. The *Social Psychology* of McDougall, it is claimed, furnishes an adequate basis for an objective ethics which will satisfy the demands of empirical psychology. *Discussion: Error and the New Realism* (pp. 410–423): A. O. LOVEJOY. – A criticism of the three different solutions offered by Professors Holt, Montague, and Pitkin, of the problem of error and illusion and their reconcilement with the main thesis of neo-realism, with the conclusion that the enterprise in which these neo-realistic writers is engaged is "one in which success is impossible." *Reviews of Books:* James H. Leuba, *A Psychological Study of Religion:* ERNEST L. TALBERT. Emile Durkheim, *Les formes élémentaires de la vie religieuse:* IRVING KING. Herbert Leslie Stewart, *Questions of the Day in Philosophy and Psychology:* GEORGE H. SABINE. *Notices of New Books. Summaries of Articles. Notes.*

Castle, Cora Sutton. A Statistical Study of Eminent Women. Archives of Psychology, No. 27. New York: The Science Press. 1913. Pp. vii + 90.

Hollingworth, H. L. Advertising and Selling: Principles of Appeal and Response. New York: D. Appleton Company. 1913. Pp. xiii + 314. $2.00.

Hyslop, James H. Psychical Research and Survival. London: G. Bell and Sons. New York: The Macmillan Company. 1913. Pp. x + 207. $1.00.

Lasson, Georg. Hegels Schriften zur Politik und Rechtsphilosophie. Leipzig: Verlag von Felix Meiner. 1913. Pp. viii + 513. 7 M.

Ludowici, August. Das Genetische Prinzip: Versuch einer Lebenslehre. München: F. Bruckmann. 1913. Pp. 299. 6 M.

Mamelet, A. Le Relativisme Philosophique chez Georg Simmel. Paris: Librairie Félix Alcan. 1914. Pp. xi + 214. 3.75 F.

Maritain, J. La Philosophie Bergsonienne. Paris: Marcel Rivière et Cie. 1914. Pp. 477. 9 F.

Richter, Raoul. Essays. Leipzig: Verlag von Felix Meiner. 1913. Pp. xv + 416. 4 M.

Schleiermacher Ausegewahlte Werke in vier Banden. Band II. Leipzig: Verlag von Felix Meiner. 1913. Pp. xxx + 703. 12.50 M.

NOTES AND NEWS

Letter from Professor Wilm

To the Editors of the Journal of Philosophy, Psychology, and Scientific Methods:

I have to thank Professor Hocking for the interesting comments on a recent book of mine called "The Problem of Religion," which he printed in this Journal.[1] I think, however, that those who have read Mr. Hocking's review, but have not read my book (and the latter class must easily include the majority of mankind) may have received a very partial view of the sort of philosophy which my book really attempts to express. This would, by itself, be a fact of very slight importance. Since, however, the matter involves a principial question in philosophy, one which seems never to remain long in abeyance, the question, namely, of philosophical method, it may be worth while to exploit it somewhat further.

"The problem of religion," Mr. Hocking writes, apparently with critical intentions, "reduces, for the author, to a question of theory: 'the only valid source of religious truth is philosophy.' The contributions of social tradition and of intuition to religious knowledge receive scant recognition in comparison, for example, with their place in Royce's 'The Sources of Religious Insight.' Philosophy, as here understood, summarily excludes revelation or authority in any historic sense."

Now, in so far as the positions here attributed to me serve to disparage pseudo-scientific and occult methods of arriving at truth, and emphasize methodically guarded reflection upon our experience as the sole *organon* of the philosophy of religion, I most cordially subscribe to them. On the

[1] Vol. X., page 719.

other hand, I disclaim the suggestion, apparently also attributed to me, that truth can be arrived at by the manipulation of empty concepts, or that religion, even, comes into being as the result of formally logical processes. Philosophy does not create religion *ex nihilo* any more than it creates art or the state. Our "social experience," including the social experience of the past as crystallized in tradition, does, of course, furnish the indispensable materials for any religious interpretation of the world. We do not pick our philosophies out of the air. On the other hand, social experience, whether original or traditional, can not be accepted unreflectively. But the critical reflection upon experience is philosophy.

Furthermore, religion has uses, and it contains poetic and sentimental values which are to many persons very precious, and which can be felt without theorizing about them. But these values and graces can be exhibited in their context and articulately justified only by philosophy. The only alternative to this which I see is a mystic absorption which either chokes utterance completely, or else limits the intellect to the stolid reiteration, "God is great." It is a matter for congratulation that Professor Hocking has himself not rested in so brief a creed, but has written a thick book to show both that God is great and in what sense great.

E. C. WILM.

WELLS COLLEGE.

The American Psychological Association and the American Philosophical Association held a joint meeting at Yale University on December 29 to 31. This was the twenty-second annual meeting of the former association and the thirteenth annual meeting of the latter association. On the evening of December 29 the President of the Philosophical Association delivered his address. A joint dinner of the two associations was followed by the address of the President of the Psychological Association and an informal smoker on the evening of December 30. The joint meeting of the two associations was held on December 31. The Psychological Association elected the following officers: President, Professor R. M. Ogden, of the University of Tennessee; Secretary and Treasurer, Professor W. H. Sheldon, of Dartmouth College; Members of Council, Professor S. I. Franz, of the Government Hospital for the Insane, Washington, D. C., and Professor G. M. Whipple, of Cornell University. The following officers were elected by the Philosophical Association: President, Professor J. H. Tufts, of the University of Chicago; Vice-president, Professor W. H. Sheldon, of Dartmouth College; Secretary and Treasurer, Professor E. G. Spaulding, of Princeton University; Members of the Executive Committee, Professor C. M. Bakewell, of Yale University; Professor I. Woodbridge Riley, of Vassar College, and Professor Wendell T. Bush, of Columbia University (to serve one year in place of Miss Calkins, resigned).